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# Beyond the senses: perception, the environment, and vision impairment

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The 'sensory turn' in anthropology has generated a significant literature on sensory perception and experience. Whilst much of this literature is critical of the compartmentalization of particular 'senses', there has been limited exploration of how anthropologists might examine sensory perception beyond 'the senses'. Based on ethnographic fieldwork with people who have impaired vision walking the South Downs landscape in England, this article develops such an approach. It suggests that the experiences of seeing in blindness challenge the conceptualization of 'vision' (and 'non-vision'). In place of 'vision' (as a sense), the article explores 'activities of seeing' – an approach that contextualizes the visual to examine the biographically constituted and idiosyncratic nature of perception within an environment. Through an ethnography of seeing with anatomical eyes and 'seeing in the mind's eye', it articulates an approach that avoids associating perception with anatomy, or compartmentalizing experience into 'senses'.

When I volunteered in 2012 as a sighted guide to walk the South Downs landscapes in East Sussex, England, with people who have impaired vision, I was surprised how vividly my companions described what they could 'see'. Rachel<sup>1</sup> described what her blindness 'looked like', narrating the smoky-coloured patches and gradations of her visual field like she was reading a map. Although identifying as 'partially sighted' – explaining that she could see with her anatomical eye<sup>2</sup> – Rachel also described herself as 'blind'. Being 'sighted' and 'blind' was a liminal experience that was interpersonally relational, altering throughout her life course, and changing with the nuanced textures of the light in which she was immersed. The qualities of Rachel's sensory perceptions were not consistent: the world was alive with light and colour in some moments, but only 'black' with immense absence in others. By contrast, Karl described himself as 'totally blind', with no light perception, but explained that he could 'see all the time'. This was a 'phantom vision' from the sight he had earlier in his life, an embodied way of seeing that could be intentionally imagined but also 'triggered' by the environment around him: the sensation of a nettle's sting, or the sounds of the woodland canopy swaying in the breeze overhead.

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This article proposes an alternative approach to current anthropological imaginings of vision, shifting from conceptualizing and approaching *vision* as a sense, to examining activities of *seeing*. This is necessary to account for the multiple ways in which people 'see' – with and without anatomical eyes – to capture the ambiguities and paradoxes of seeing in blindness. This line of reasoning points to the implications of a 'sense'-based approach that has underpinned anthropological conceptualizations of sensorial perception, addressing what this means for anthropological understandings of vision, and, through this, the concept of 'senses' more broadly. As Pink explained, 'senses' have become a key theme in contemporary anthropology (2010: 331). Whilst the term 'sensorium' is used to refer to the continuum of sensory perception prior to its segmentation into 'senses', anthropologists have been primarily concerned with the distinctions of the sensorium into 'senses' (see Howes 1991; Howes and Classen 2019 [1991]). Notions of 'senses' have been central to the historical framing of the sensory body and integral to how anthropologists have approached the sensorium. In the developments of an anthropology of the senses and sensory anthropology, there has been an emphasis on developing accounts of the 'relationship between senses' (Howes 2010: 334), their 'interconnectedness' (Pink 2010: 331) and 'interplay' (Grasseni 2007a: 1). Anthropologists have used various terms to discuss configurations of senses and their relationships, including 'multisensoriality' (Pink 2009) and 'intersensoriality' (Connor 2004; Howes 2005). These terms have the potential to challenge distinctions between 'senses' and avoid the methodological privileging of one sense, yet this article proposes an alternative approach to studying perception, one that is not 'sense'-orientated.

Framing anthropological investigation of sensorial experience around the notion of 'senses' as categories of study and analysis can risk categorizing often ambiguous perceptual experience (Petty 2015). As Irving suggested, '[A]nthropology glosses over individual differences to generate orderly theories about disordered messy bodies' (2009: 311–12). Further, in describing the characterizations of vision and hearing in the Western tradition, Ingold proposed that 'there are puzzles and inconsistencies which suggest that these distinctions may reflect more upon the preconceptions of anthropological analysts than upon the actual sensory experience of the peoples among whom they have worked' (2000: 252). Using analytic notions of 'senses' as an anthropological method can risk compartmentalizing (or missing) nuances of sensorial experience. It can obscure the ways in which perceptual phenomena not immediately associated with 'senses' are experienced sensorially, such as inner dialogue, 'seeing in the mind's eye', and the imagination (described through a notion of 'interiorities' by Hogan & Pink 2010; Irving 2011; Rapport 2008).

This is not to say that a sensory approach is redundant. Culturally orientated studies of the emic configurations, meanings, and experiences of 'senses' certainly have their place in contemporary anthropology and have been integral to the development of anthropological interest in sensory perception and experience. What this article problematizes is the assumption that 'senses' are given perceptual capacities with particular qualities and that the notion of 'senses' is consistently useful to the study of sensory experience. The sensory experiences presented in this article of people who have impaired vision require a rethinking of a 'sense'-based approach given that the perceptual experiences discussed here cannot be associated with 'senses' in a clear or useful way. This problematizes broader conceptualizations of the sensory, perceptual body within which 'senses' are located. The sensorial body is often assumed to have

normative 'sensory apparatus' (i.e. not 'impaired'), which is enculturated. In examining the sensory experiences of walkers who have impaired vision, the sensory body is shown to be resolutely idiosyncratic: biographically constituted whilst temporally transcendent, potentially with multiple body schemas; haemorrhaging notions of 'interior' perceptual experience differentiated from that 'exterior' to the body, and inconsistently distinct in the perception of the environment. This article will therefore propose what I term an *inclusively sensorial* and *sensorially emplaced* approach to the study of sensory experience.

The conceptualization of 'vision' as a 'sense' for anthropological study is particularly appropriate to demonstrate the necessity for this new approach. Vision has been conceptualized and distinguished as a problematic 'sense' in the formation of the anthropology of the senses (see Howes 1991). It has been characterized as a dominating sense associated with objectification (Ong 1982; Stoller 1989) and distancing (Fabian 1983; Merleau-Ponty 1964; Willerslev 2007), leading to a counter-ocularcentric anthropological movement to study 'non-visual' senses (Fabian 1983; Howes 1991).<sup>3</sup> Blindness has often been imagined as the antithesis of 'vision'. As Elkins described it, '[S]ight and blindness are like white and black or on and off: they are opposites, and when sight is working, blindness is not present' (1997: 202). By proxy, anthropological conceptualizations of vision have distinguished it from 'non-visual' senses such as touch and hearing (for discussion, see Howes 1991; Howes & Classen 2019 [1991]), and studies of vision impairment have often focused on these latter senses (e.g. Golledge 1997; Kitchin, Blades & Golledge 1997; Paterson 2006; 2007).

Following counter-ocularcentric critiques of vision, there has been a move to reimagine vision within the discipline. Grasseni (2007a) proposed a 'rehabilitation' of vision within the discipline, responding to critiques of visualism that had problematized vision as a method and subject of study. The project of examining 'skilled visions' demonstrated the pluralities rather than universality of 'vision', proposing that vision should be reconsidered an embodied, skilled, and trained sense. Grasseni's edited volume *Skilled visions: between apprenticeship and standards* (2007b) demonstrates these pluralities through methodologies of apprenticeship. In the introduction to this volume, Grasseni argued that vision is not an 'isolated' sense but 'multisensory' (2007a: 1-5), proposing that it is through processes of visual enskillment that humans develop both situated practices and improvisations (2007a: 3-6). Ingold also argued against the 'reduction of vision' present in critiques of visualism (2000: 287). Historicizing conceptualizations of vision and the distinction of it in relation to other senses such as hearing and touch – 'to the extent that they can be distinguished at all' (2000: 268) – Ingold introduced the experience of blindness. Drawing on Hull's exceptional account of his sight loss, Ingold situated blindness as the *lack* of vision, distinguished from 'sighted' (2000: 271-4).

Yet the premise that 'vision' is a stable, distinct category of sensory experience and analysis is problematic. Admittedly, this is also a broader concern when addressing 'senses' in anthropological discussion. An issue that permeates anthropological engagements with 'vision', in particular, is the clarity with which we think we can see 'it'. Distinctions of 'vision' from 'non-vision' or 'blindness' are eclipsed in the ethnography with people who have impaired vision presented. Most people who identify as 'vision-impaired' or 'blind' in fact have vision capacities and *see*. Even people who have no vision capacity through their anatomical eyes and whose vision is non-congenitally 'impaired' describe experiences of 'seeing in the mind's eye', as a 'phantom vision'.

'Blindness' and 'seeing' – non-vision and vision – are not therefore mutually exclusive. 'Blindness', as will be shown, is in fact seen. 'Vision' is paradoxically 'non-visual'. It is thus problematic to distinguish 'senses' as stable, characterizable categories of experience that are differentiated from other 'senses' for our anthropological discussion.

Anthropologists have focused almost exclusively on 20/20 vision both in critiques of visualism and in the subsequent contributions to 'rehabilitate' vision within the discipline. This has relied upon reified understandings of what constitutes vision, the visual, and the visible: principally, as that which is apparent through anatomical eyes in the medium of light for a 'normative' sensory subject. This requires us to consider the 'visionism' produced in scholarly accounts. 'Visionism', based on inherent assumptions about vision as a given 'sense', usually rests on notions of normalized 20/20 vision. Davis pointed to how this 'normative' sensory subject is lodged in the majority of visual culture studies (2019: 63), and how this, too, is reflected in ophthalmology 'through its obsession with seeing *properly*' (2019: 68, original emphasis). Case studies of 'vision impairment' require us to reconsider assumptions about the qualities of 'vision', what constitutes the 'visual', and consider *spectrums of visibility*. The case for problematizing characterizations of other 'senses' built from notions of a 'normative' sensory body is pertinent more widely. Drever, for example, makes a case for recognizing aural diversity to challenge the 'tacit preselected audiometric norm or even a pair of golden ears' underlying understandings of aural perception in sound composition (2019: 85).

The cultural practice of the country walk within the English countryside is a pertinent case study in addressing anthropological notions of 'senses' given the long association between landscape and *seeing* within Western thought (Hirsch 1995: 2; Macpherson 2005; Porteous 1990: 4). Hirsch attributed this ocularcentric legacy to language, pointing to how the word *landscape* was introduced into the English language as a technical term used by painters in the late sixteenth century, with origins in the Dutch word '*landschap*', suggesting that 'what came to be seen as landscape was recognized as such because it reminded the viewer of the painted landscape' (1995: 2). This relationship between landscape, seeing, and painting was argued to have initiated and crystallized perspectival techniques of *viewing* the landscape (for further commentary, see Wylie 2007: 144; cf. Bunkše 2007; Cosgrove & Daniels 1988; Macpherson 2005; Porteous 1990: 4). This was reflected in nineteenth-century Romanticist notions of the countryside visitor who sits and views the landscape at vantage points, exercising the believed superior sense of vision whilst unimpeded by haptic or kinaesthetic sensations (Ingold 2004: 323). In exploring experiences of night-time art installations within the Scottish countryside for sighted subjects, Nina Morris suggested that 'in the dark how one senses what is surrounding is so fully restructured that it may no longer be appropriate to even label it as landscape, given that this term has embedded within it a notion of the scene and that which is visible' (2011: 316). Yet ethnography of the sensory experiences of the English countryside for people who have impaired vision – even no anatomical vision – reveals a landscape that *is* made visible. This points to the need to rethink how we interpret notions of vision, the 'senses', but also the landscape more broadly.

This article draws on ethnography of the sensory perception of the South Downs landscape, England, amongst walkers who have impaired vision to develop an alternative anthropological approach to the study of sensorial experience: specifically, a revaluation of the sensory organization of experience in studies of sensoriality. It presents experiences of Rachel, Karl, Elen, and Thomas, who had enjoyed country walks

earlier in life, but now had less opportunity to walk in the countryside as they required a sighted guide. Walking one-to-one, in a pair, we visited the countryside accessible via bus, settling on regular visits to a park favoured for its rambling woodlands and open downland. Together we walked that park through changing weathers and seasons over a timespan of two to six years; the majority of the fieldwork took place between 2012 and 2014. A person-orientated methodology, this approach aimed to illuminate 'the hidden geography within a single human being' (Bunkše 2007: 219), rather than attempt to account for the experience of 'people who have impaired vision' in a generalized manner as some kind of grouping.

The approach to studying sensory perception that will be proposed is demonstrated through ethnographic examples of seeing with anatomical eyes and 'seeing in the mind's eye' as a 'phantom vision' experienced amongst people who have impaired vision.<sup>4</sup> The former discussion will focus on the experiences of Rachel and Thomas, who describe their vision as 'partial' and 'congenitally impaired' (i.e. from birth); whilst the discussion of 'phantom vision' focuses on the experiences of Karl and Elen, who had both experienced significant sight loss. Karl grew up with what he described as 'congenital partial sight', whilst Elen explained that she was 'fully sighted' and lost her sight overnight in her twenties due to illness. These biographical changes in the qualities of sight and loss are significant in understanding the biographically constituted nature of sensory experience that will be described.

### **Studying activities of perception using an inclusively sensorial and sensorially emplaced approach**

The approach proposed is situated within a phenomenological anthropology of embodiment (following Csordas 1990; Desjarlais & Throop 2011; Ingold 2000; Jackson 1996; Stoller 1997). Examining active and attentive perceptual engagement, this article proposes study of *activities* of perception rather than 'senses' (e.g. seeing rather than vision), developing what I term a *sensorially emplaced* and *inclusively sensorial* approach to examine sensory perception. Although this theoretical approach is broadly applicable to multiplicities of sensory experience, in order to illustrate its formation and application, whilst contributing to the reimagining of 'vision' in anthropology, this article focuses on phenomena of seeing with anatomical eyes and 'seeing in the mind's eye', whilst contributing to the reimagining of 'vision' in anthropology. These notions will be outlined in the following paragraphs and then demonstrated through the ethnographic sections.

I coin the term *inclusively sensorial* to refer to an approach to studying sensory perception which avoids: (a) inductive association of anatomy with specific capacities; and (b) compartmentalizing experience into 'senses' methodologically and analytically. Drawing out sensuous descriptions is a fundamental method in keeping alive the sensorial ambiguities, paradoxes, and richness of sensory perception throughout the research process – methodologically, analytically, and theoretically. An inclusively sensorial approach prioritizes phenomenological experience, in part through avoiding abstraction, categorization, or generalization of sensorial experience into the disciplinary conventions of 'senses'. It thus avoids contributing to the anthropological imaginings of demarcated 'senses' – the issues which were demonstrated through the characterization of 'vision' distinguished from 'non-visual' senses. An inclusively sensorial approach captures the ambiguity of perceptual experience, for example the difficulties of distinguishing 'listening' from 'feeling' for echolocators who have

impaired vision (see Petty 2015) and experiences of 'seeing' without anatomical eyes, as discussed in this article.

The inclusively sensorial approach is enabled by a methodology, proposed in this article, that focuses on *activities* of perception rather than 'senses'. This moves away from a focus on customary habituations characteristic of an anthropology of practice (e.g. Bourdieu 1977; Mauss 1973) to the *immediacy* of the participant's active and intentional engagement within an environment as it emerges. A focus on activities forefronts that perception is active and idiosyncratic in the immediacy of that moment, that environment, as well as the perceiver's customary habituations. In the context of this ethnography, this requires consideration of extended perceptual capacities through tools such as a monocular. A focus on activities of perception was developed through noting how my walking companions engaged with the environment in ways that relied on spontaneity, investigation, improvisation, and adaptation to the present situation rather than embodying established skills practised for the immediate task or situation at hand.<sup>5</sup> Intentions to 'see', for example, incorporate many varied activities, as will be shown. The quality of each participant's attention enabled study of activities of perception in this context. Attention had been intentionally developed throughout the life course or during rehabilitation to sight loss. Attending to sensory subtleties is a fundamental necessity in performing daily tasks for people who have impaired vision. As will be shown, 'attending', as conscious engagement, involves actively ignoring or 'backgrounding' as well as 'focus'.

*Sensorial emplacement* is a term developed to refer to the ways in which any perceptual activity and experience is afforded by, and specific to, both the environmental conditions (following Gibson 1979) and capacities of the perceiver. Activities of perception are sensorially emplaced: pertaining to that individual and their capacities as experienced in that environment at that time. These ideas are well established within anthropological studies of the perception of the environment (e.g. Ingold 2000), but the term *sensorially emplaced* is relevant in that specific attention is given to developing engagement with, and an account of, the capacities<sup>6</sup> of persons. The ethnography presented demonstrates that the capacities of a person alter – even transform – within diverse environments. 'Blindness' or 'seeing', as sensory capacities/experiences, are not experienced consistently. Capacities are idiosyncratic, mutable, and biographically constituted. The latter is particularly important when examining sensory rehabilitation, for example, 'seeing in the mind's eye' as a 'phantom vision' of seeing through anatomical eyes before sight loss. This will be examined in the ethnographic discussion using Merleau-Ponty's (2005 [1962]) notions of the *habitual body* and *present* (or *actual*) *body*. A sensorially emplaced approach acknowledges that the environment is not a platform of perception or something merely 'out there' to be perceived, but that perception is what David Morris referred to as a co-synthesis of the body and the world in one act of 'co-naissance' (1999: 280).

## Seeing

'What can you see?' is a question that Rachel and Thomas were asked regularly in their everyday lives. The reason for this, Thomas explained, is because 'people try to work out how blind we are'. Although registered 'blind', they self-identified as 'partially sighted', and were recognized as such by what they called the 'vision-impaired community', because they had some capacity to see with their anatomical eyes. Their hybrid status as 'blind' or 'partially sighted' was liminal, shifting in relation to the sight capacities



of those around them (including myself, referred to as ‘fully sighted’), the sensorially emplaced qualities of their sensory capacities, and the changing qualities of their medicalized ‘conditions’, which they referred to regularly in describing their sensory experiences. Thomas referred to his ‘congenital nystagmus’ and Rachel to ‘congenital nystagmus and cataracts, with an artificial left eye’. They described nystagmus as the involuntary movement of the eye(s), alongside their ‘partial’ sight.<sup>7</sup> Whilst this offered some sense of how and what they might see, these qualities were inconsistent and changed according to variations in light, qualities of attention, and proximity.

Light has been discussed as the ‘medium’ through which we see (Edensor 2013; Gibson 1979; Ingold 2000; 2005). Ingold proposed that ‘we do not see light, we do see in light’ (2005: 97). Yet for Rachel and Thomas, who experienced a ‘sensitivity’ to light due to the nature of their ‘conditions’, light was *seen*. Light was often the subject, as much as the medium, of seeing. Nor was it consistently the ‘spark’ of vision (Ingold 2015: 97), for it also had the potential to cast blindness. Rachel and Thomas often narrated the changing qualities of the light in detail as we walked, attentive to its diffusion, colour, ‘glare’, tones, and consistency. This varied along the pathways, where the light of the open downland was relatively consistent compared to the woodlands, which harboured more complex textures of shade, light at different angles, and diffuse ‘greeny’ tones. This was an elemental alchemy: the wind cast luminous flashes into shady gloom and stirred leaves that cast hundreds of constantly shifting shadows onto the pale chalky path. This rapid dance of woodland light and shadows was intensely ‘distracting’ and all-consuming. ‘Blindness’ could strike with both light and darkness, eclipsing the sense of one another. Sudden, extreme changes in the amount of light caused an ‘inability to see’ that left Rachel and Thomas standing, waiting for their eyes to adjust. This was common when entering or leaving woodland, but also with changes in the density of the woodland canopy. Whilst light and shadow are significant in shaping the qualities of how and what is seen, ‘sight cannot be defined as “an experience of light”’ (Howes 2011: 319). As will be shown, ‘seeing in the mind’s eye’ is potentially independent of environmental light altogether.

There are spectrums of visibility, and ‘blindness’ is inside rather than outside of this. ‘Seeing’ is contextual: a ‘seen’ object is produced in relation to the qualities of other discernible objects. ‘Seeing’ is not inherently objectifying but incurs spectrums of visibility in which ‘objects’ of varying degrees and characteristics may arise and *become* distinguished. ‘Seeing’ did not consistently provide an immediate comprehension of *what* Rachel or Thomas saw, but indistinguishable colours and shapes described as ‘light’ or ‘dark’ coloured. To have meaning, one had to ‘look’ – attending through investigative and purposeful engagement (cf. Elkins 1997: 21–2). This is an inclusively sensorial activity of the whole body: moving the head, reaching out with the hands, probing with the fingers, and prodding with the toes (cf. Downey 2007: 227; Ingold 2000: 261; Lund 2005: 30). As Rachel described it, ‘My head is always down, I am not glancing around. So, I am using my sight, but I am always *feeling*, each step – *it sounds really dramatic, but I am!* Hands are always out touching’.

To have a sense of *what* one looked at, rather than its attributes of colour and shape, was sensorially emplaced. It involved deciphering and deducing what one was looking at through interpreting the ‘lightness’ or ‘darkness’ of the colour, identifying shape, and considering context. ‘Seeing’ a ‘view’ – an open expanse of landscape – was ‘blurred’ and ‘indistinguishable’. Using a monocular (Rachel) or zooming in with a camera (Thomas), they could ‘join up’ ‘chunks’ of the view using landmarks, identify



shapes and colours, and thereby deduce *what* they were looking at. To illustrate, in describing the view at the top of a downland hill, Rachel explained that 'a line of dark ... is probably woodland. But it's purely by different colours that I know what it is'. There are therefore spectrums of visibility within the forms and ways of 'seeing', with and without identifiable 'objects' seen. Further, colours, shapes, and outlines may become the *subject*, rather than attributes of it. This is an ontology of seeing the environment in which the subject is reconfigured not as a 'thing' but as its component qualities, such as colour. To perceive 'brown' or a 'dark colour' rather than a 'tree', for example. This is 'visual' in the qualities of its visibility, rather than 'object' produced by those qualities.

'Seeing' is not the absence of 'blindness': 'blindness' can be seen, and 'seeing' and 'blindness' may be experienced mutually. Further, selective inattention within the 'visual field' was necessary to 'see'. 'Looking' was experienced not as a 'synergic system' in the way that Merleau-Ponty described – 'gaze, my touch and all my other senses are together the powers of one and the same body integrated into one and the same action' (2005 [1962]: 568) – but as a tiring, *inclusively sensorial* 'struggle'. This was because Rachel and Thomas experienced involuntary, continuous movement of the eyes, which they explained as characteristic of nystagmus. This movement can be in any direction, including to the sides, up and down, or in circles, making it very difficult to focus and creating a sensation of the 'whole world moving'. This could be slowed by positioning the head to find the 'null point': the gaze position of least eye movement and 'best vision'. Further, by looking from preferred angles, Rachel and Thomas optimized their strongest eye and could 'spot' or 'fix' their gaze to orientate around the stigmatism. 'Spotting' was a technique of 'fixing' attention on an aspect of the environment, focusing their null point, whilst actively ignoring the wider visual field characterized by movement. This attention relied on an ability to selectively discriminate and discipline attention (cf. Grasseni 2007a: 13), specifically within the sensorially emplaced context. Merleau-Ponty described how seeing is characterized by a spatio-temporal structure: perspective, field, horizon, foreground, and background.<sup>8</sup> In focusing the gaze, some objects inevitably become backgrounded in the visual field, whilst remaining present and potentially foregrounded at any point (Merleau-Ponty 2005 [1962]: 143). In looking, Rachel and Thomas actively ignored (backgrounded) aspects of their visual field characterized by distracting movement. They described an awareness of both the 'blindness' and varied qualities of 'seeing' that are *simultaneously* present. 'Seeing', 'looking', and 'blindness' were intermittent and experienced mutually – even purposefully – in order to see.

Whilst 'seeing' and 'looking' are most often distinguished from 'blindness', 'blindness', 'blackness', or 'absence' was also *seen*. This may be the movement Rachel and Thomas described as 'nystagmus', or as patches of absence within the visual field. As Elkins described it, '[T]he blind area may be physically visible as a gray region, rather than unthought and unseen as a pure absence of sight' (1997: 216). This points to how 'non-vision is therefore inside vision, it is a form of vision and hence a necessary relationship with vision' (Althusser, cited in Jay 1993: 329). Seeing is thus an experience of seeing the qualities of one's own body – as movement and blurred regions in the visual field – as well as that experienced as the 'external' environment. Seer and world are blurred in seeing, as what is seen. This is true of all perception. It is made clear in the experience of seeing with impaired vision, as the perceiver does not see the landscape as an object separate from themselves as has been articulated in classical subject-object relations of perspectival landscape perception, but sees their body and

landscape as suffused. John Hull, in describing his experience of sight loss, prompts an intriguing reflection on the reconfiguration of self-landscape relations in asking, '[I]s it true that the blind live in their bodies rather than the world?' (1997: 119). Yet even in the construction of normalized 20/20 vision, seeing is not a 'clear lens' of beholding an external, distanced world. The perceiver and environment are always fundamentally fused in perception. Admittedly, this might *look* less fused, blurred, and fuzzy with the corrective lenses that the majority of us wear. There is nothing clearly 'outside' or 'separate' from the body in sensing.

Distance is complex, both as a notion and as an experience. Merleau-Ponty asserted that distance is the precondition of seeing (2000 [1968]: 135): '[T]o see is to have distance' (Willerslev 2007: 26). Human geographers have questioned the capacity for people who have impaired vision to comprehend distance, associating distance with vision, distinguishing this from 'proximity' 'senses' such as touch or taste (see Golledge 1997; Kitchin *et al.* 1997). Willerslev described how things are visible only from certain distances, for example if one looks too closely there is an experience of blurriness (2007: 29–30). These ideas prompt reflection on what it is to 'see' and point to the nature of visibility. 'Blurriness' is in fact an experience of seeing – the visible. Rachel and Thomas described how they experience a 'contraction of vision', manifest as particularly limited 'distance vision'. To look at 'detail' – described in terms of clear perception of shape, visible colour rather than 'light' or 'dark', pattern, and texture – they would both move their eyes within approximately 15 centimetres of that which they wanted to see. Thomas demonstrated this with the example of a large green sycamore leaf, extending his arm and slowly bringing this closer to his eyes until he announced that the 'green was now visible'. In what he described as the 'middle distance' (which he specified as around 15 to 20 metres), he only identified colours in terms of 'light' and 'dark'. Closer proximity, rather than greater 'distance', was therefore imperative to his perception of colour range. This was sensorially emplaced: the distance beyond the length of Thomas's outstretched hands within canopied woodland was most often *visible* as darkness, whilst the consistency of the light in the open downland afforded experiences of seeing shapes, outlines, and colours discernible as 'light' or 'dark'.

### Seeing in the 'mind's eye'

I think I would be correct in saying that most people believe that those who are totally blind see nothing but blackness. In my case this is not so, and, furthermore, blackness is something I rarely experience. Wherever I am and whatever I am doing, my mind provides almost constant imagery for me.

Karl

Blindness can be an intensely visual experience. It was surreal and sometimes uncanny the way that Karl and Elen, who both have no visual perception through their anatomical eyes and had lost their sight over twenty years ago, narrated what they could 'see' during our walks. This was described as 'seeing in the mind's eye', an experience of seeing without vision through anatomical eyes, which is accounted for in various fascinating memoirs of sight loss (including Hull 1997 and Torey 2003). 'Seeing in the mind's eye' has been explained in the neurosciences as a 'phantom vision' experienced amongst people who have non-congenitally impaired vision (Menon *et al.* 2005: 349; Schultz & Melzack 1991: 809). It is thus biographically constituted and reflective of previous experiences of seeing with anatomical eyes, pointing to the temporalities

infused in perceptual experience. As Bergson explained, '[T]here is no perception which is not full of memories, we mingle a thousand details out of our past experience' (cited in Howes 2005: 181). This phenomenon shifts understanding of what *can* be 'visible' and the nature of *how* the 'visual' presents in the rehabilitation to 'blindness'. This requires an inclusively sensorial and sensorially emplaced approach to elucidate the kaleidoscopic, transitory nature of the sensory body and experience.

When I started walking with Karl in 2010, he described his experience of 'seeing in the mind's eye' as similar to how he had seen with his anatomical eyes before losing his sight in that the 'visual images' he saw were three-dimensional, moving, coloured, with depth and field. These visuals were 'triggered' or intentionally created, but clearly distinguished from hallucinations induced by conditions such as Charles Bonnet Syndrome.<sup>9</sup> Walking along a path at the edge of the woodland with his guide dog Roxy, Karl described,

It's constantly happening but things are triggering it in the sense that – Roxy's back there, so I see her back there – information comes and that influences it ... Yeah and if there was no sound, it would probably be just misty, just grey ... As soon as I hear a sound or walk somewhere different, it opens up more. So, a bird gives you depth, you think 'yeah, there's a tree there' and start seeing it.

This 'triggering' in the perception of a 'presence' – the sound or feel of a tree, for example – instantly resulted in seeing the source. Visual images could also appear randomly or be intentionally 'built' (cf. Torey 2003). Some visuals were hard to manipulate: for example, both Elen and Karl saw their bags as different colours to me but could not change this even if they wanted to as it had 'set'. Whilst this experience is referred to as 'visual', I agree with Mitchell's assertion that there is no 'such thing as an exclusively, purely visual medium' (2002: 175), hence the necessity for an inclusively sensorial approach.

This phenomenon calls for an inclusively sensorial approach that recognizes 'whole body seer[s]', where 'perception is no longer specialized or located in a specific part of the body, but the whole body becomes an organ of perception' (Hull 2001). 'Seeing in the mind's eye', as a 'phantom vision', is birthed but severed from anatomical eyes. Merleau-Ponty's (2005 [1962]: 164) notions of the *habitual body* and *present body* are useful to examine the temporal qualities of sensory capacities. The experience of 'seeing' independently from anatomical eyes experienced amongst people who have non-congenital blindness has been explained as a 'visual analogue of the phantom limb phenomena' (Schultz & Melzack 1991: 809; cf. Menon *et al.* 2005: 349). Merleau-Ponty identified the 'phantom limb' experience as an example of body temporality, which is not the order of 'objective time' (2005 [1962]: 189). This 'haunting of the present by a particular past experience is possible because we all carry our past with us insofar as its structures have become "sedimented" in our "habitual body"' (Langer 1989: 33). 'Phantom' phenomena are thus not a recollection or idea but an 'ambivalent presence' (Merleau-Ponty 2005 [1962]: 163) or 'quasi-presence' – a 'former presence which cannot decide to recede to the past' (2005 [1962]: 169). The *habitual body* therefore refers to the sum of previous experience, customary habituations, and the pre-reflexive quality of embodiment; whilst the *present body* refers to present experience which the *habitual body* is active through.

'Seeing in the mind's eye' is afforded by the previous capacity to see in the medium of light through anatomical eyes.<sup>10</sup> The qualities of *what* is seen may therefore embody perspectives of the past. Karl evocatively described his 'mind vision' as always being from the 'perspective' of a child. He explained that this is because he experienced most

of his sight during his childhood, before it rapidly deteriorated in his teens. This was manifest, he described, as a vivid sense of colour, especially primary colours, which he was 'attracted' to as a child. The perspective from which he saw in his 'mind's eye', he explained, was from a shorter height than he would now see with anatomical eyes as it reflected his height as a child. Karl elucidated that he is not sure 'how big things look from the perspective of an adult', although he feels and listens from his present adult perspective. His sense of the body in proportion and position within the environment when 'seeing with the mind's eye' is therefore not equivalent to that which it is in other activities of perception. This sensorially emplaced approach indicates that there are potentially multiple perspectives and proportions of the lived, sensory body. There is not an experiential singularity of the *body schema* – as the non-conscious operative performance of the body positioning within and responding to the environment (Gallagher 1986: 548). The diversity of this embodiment in varied activities of perception thus shifts senses of relationality to and within the environment. This is unlikely to be restricted to the experience of vision impairment, but is relevant to other forms of rehabilitation and rehabilitation more broadly.

Over time, Karl and Elen have rehabilitated to their present 'blindness'. Their capacity to 'see in the mind's eye' has faded and its qualities have changed. Things look quite different to how they did when they saw through their anatomical eyes, but neither of them have yet experienced what Hull referred to as 'deep blindness' (1997: 181). This is the point at which the very idea of seeing becomes abstract and one resembles somebody whose blindness is congenital. Thus, although the experience of 'seeing in the mind's eye' is recognizable as a 'phantom vision', it is transfigured. It is transfigured in both the form of what is seen and the activities of seeing. The subject of *what* is seen might change: for example, both Elen and Karl saw presences such as sound. The location of the 'mind's eye' – from *where* one sees – also changed. Elen and Karl described how their initial experiences of 'seeing in the mind's eye' involved seeing from the location of their anatomical eyes.<sup>11</sup> Over the years, they began to see from multiple perspectives, angles, and directions, including seeing from the back of their head. Yet this was still located within the head – if from any 360 degree point – and could not be intentionally relocated to see from another part of the body. In this way, 'seeing in the mind's eye' is both a 'phantom vision' and a reconfigured inclusively sensorial way of seeing in rehabilitating to the present body.

The visual qualities of what Karl and Elen saw in their 'mind's eye' were not consistent, but sensorially emplaced and inclusively sensorial. Karl described how what he saw in his 'mind's eye' reflected – or was a kind of 'seeing through' – his physical and emotional states. As we sat on the warm ground amongst the cedar trees, he explained that when he feels awake and alert, his 'mind vision' is 'more vivid' and 'much sharper'. When he is tired, his 'mind vision' is

just duller and – like, imagine a real lovely painting. It can be real sharp and clear, and it is like someone has smeared it a bit, sort of made it smeary – not so defined, the edges aren't defined. So, it is definition really. But if I am more awake, there is more definition ... so it still does that in my brain, because I can't see *anything*.

Karl described how the 'colour tones' of 'the overall image' changed with the qualities of the weather, and particularly temperatures:

Sometimes I get tints of colours. Like the other day, everything was slightly green. And if it's a lovely clear spring day – that's what I love about spring. Because if you get the sun out, but the air's cool, it

gives you a blue sense – that everything is blue. That lovely kind of electric blue, but not electric, but light blue. And it just feels so good. Everything is tinted with this crystal-clear blueness, you know – it's beautiful.

He described this as 'like wearing coloured glasses.' These colour tones were mostly primary colours – yellow, blue, red, and green – which Karl explained to be the base colours from colouring books he had as a child before his sight significantly deteriorated. 'Cooler colours,' specifically green and blue, were seen when the temperature was colder or there was an icy wind. 'Warmer tone colours' like red and yellow were experienced with the heat of the sun. Now that his eyes were 'no longer useful for seeing,' Karl described how he used them to perceive temperatures, enjoying staring into the sun. Whilst 'seeing in the mind's eye' might be described as an 'interior' perceptual experience, it embodies the sensorially emplaced qualities of the environment, and the physical and emotional states of the seer. As with the ethnography of seeing presented in the previous section, the perceiver and the environment are merged in perception. There is no perception of the environment from a distanced or separate perspective. This experience of physical and emotional states shaping what is seen is not necessarily restricted to people who have impaired vision either – perhaps emotionally embodied experiences such as drowsiness, excitement, boredom, and panic all have the potential to shape the qualities of what and how people see.

Whilst I was walking with Elen through the woodlands, she described how 'seeing in the mind's eye' had eventually become a 'loose dream' that no longer resembled seeing as she had previously experienced or recognized it. This was because she now principally saw sound. She explained, 'Well, for example, when we are walking through the forest and it is getting very closed in again, I don't see the trees. I see dark. I see sound.' Elen did not see the environment around her as tall trees, sloping hills, or winding paths, but saw sound as a 'pressure wave'. She described this with the example of her guide dog Charles's bell:

*Elen: Umm, how do I describe it? Not like colour, but more like a pressure wave.*

*Karis: Wow, but you see it as a shape then?*

*Elen: Yeah. In my head I do. In my third eye – if that's what you want to call it – mind's eye. I see it more as – for example, I can put a colour to it because for me the sound of Charles's bell is silver.*

*Karis: Righhht. And you literally see that in your mind's eye, going around?*

*Elen: Yeah, yeah. And those birds that I am hearing sound like to me – the sound I am getting is gold, like small hand bell.*

Lighter colours, Elen explained, reflected 'pleasant sounds', whilst darker colours visualized the unknown or darkness. The felt sense of being enclosed within the woodland, for example, was seen as 'blackness' or 'absence', rather than seeing the trees. Sound was the colour and image within that darkness. It appeared that 'seeing in the mind's eye' for Elen and occasionally Karl too was the visualization of sensorial perceptions that were now more strongly present since losing their sight, especially sound. Yet rather than seeing the source of the sound, as they would have before losing their sight, the sound was seen. To illustrate, instead of the bark of a dog 'triggering' a visual image of the dog in the 'mind's eye', the bark was now the visualized presence.<sup>12</sup> Similarly, Elen explained how she now 'actually sees the wind' rather than the 'things' that the wind moves, such as the leaves amongst the trees or the high grasses lively in the breeze. This is because she *feels* the wind, whereas she might have no perceptual experience of the trees or grasses it ruffles unless this sound is in earshot.

Elen now saw what had once been invisible. This is a fundamental reconfiguration of the ways in which the environment was experienced before sight loss, an alternative perceptual ontology in which the movement of air is now seen, for example. This is an environment 'fully restructured' (N.J. Morris 2011: 316) in blindness, yet still embedded with visibility, in which there is an alternative and new experience of what is 'visible'. This resists any attempts to distinguish 'senses', requiring an inclusively sensorially emplaced<sup>13</sup> approach 'beyond senses', and confronts visionist notions of what constitutes the visible and how this is seen.

### Beyond senses

This article has problematized the notion of 'senses' as a consistently useful concept for the study of sensory experience. Whilst scholarly engagement with 'senses' has developed 'multisensorial' (e.g. Grasseni 2007a; Pink 2009) and 'intersensorial' (e.g. Connor 2004; Howes 2005) approaches to show the relationships between and varied configurations of 'senses', rather than their segregation, the notion of 'senses' has been sustained nevertheless. This article has sought to go beyond 'the senses' by problematizing their centrality in sensory anthropology and proposing an alternative approach to how we might study sensory experience. This is necessary given the sensorial ambiguities of perceptual experiences and the implications of categorizing these into 'senses'. The inclusively sensorially emplaced approach proposed avoids inductive association of anatomy with specific capacities or compartmentalizing experience into 'senses', enabling us to explore the ways in which perceptual experience is afforded by and specific to the changing and biographically constituted capacities of the perceiver within the environment.

The article has examined activities of 'seeing' amongst people who have impaired vision to reappraise the very concept of 'vision'. This approach could also be used to rethink other sensory experiences, including touch, smell, taste, hearing, proprioception, and so on. The focus on vision is particularly illuminating given its centrality within anthropological conceptualizations of 'senses', in which it has been distinguished from and characterized in relation to 'non-visual' senses (see Grasseni 2007a; Howes 1991). 'Blindness' has been situated as the *lack* of 'vision' (Ingold 2000: 243–88), its opposite (Elkins 1997: 202). An inclusively sensorially emplaced approach eclipses these binary notions surrounding vision and instead ushers in the elusive, ambiguous nature of sensorial perception and makes room for the apparent paradox of 'seeing' in 'blindness'.

A focus on 'seeing in blindness' demonstrates the problematic sensory normativity inherent in an anthropology that relies on the notion of 'senses'. The 'normative' sensory subject is lodged not just in the majority of visual culture studies, but also in the anthropology of vision and arguably visual anthropology. This article thus moves debate from issues of 'ocularcentrism' (as the association of vision with power and knowledge) to consider how a kind of 'visionism' has been produced anthropologically – a 'visionism' with inherent assumptions about vision as a given 'sense', which usually rests on notions and characterizations of a normalized 20/20 vision. These arguments pertain to other characterizations of 'senses' built from notions of the normative sensory body, including, as noted above, what Drever referred to as the 'pair of golden ears' inherent in audiometric norms of aural perception in sound composition (2019: 85). Springing from and within this notion of (normative) 'vision' are senses of what is 'visual' (from 'vision') and that which is 'visible' (through vision). Through an inclusively sensorial



approach, we can demonstrate spectrums of visibility, mutating forms of the visual and shifting sensorially emplaced activities of seeing. This is pertinent for those whom my companions referred to as 'sighted' subjects, whose vision is not currently 'impaired': take your glasses off, try to make out the path in the half-light of dusk, drive into the low winter sun, and experience spectrums of visibility.

This article demonstrates the sensory body as a web of lived experiences and embodied ways of being that can be associated temporally. Whilst 'seeing in the mind's eye' can be understood as a 'phantom' vision, distinguished through Merleau-Ponty's notion of the habitual body manifest through the present body (2005 [1962]: 164), in lived experience this is more a *suffusion* that is chronologically collapsed, coalescent, and transfiguring. Perception is permeated with sensory orientations of the past alive through the body, which are made evident through a sensorially emplaced approach.

Ocularcentric and perspectival outlooks have dominated notions of self-landscape relations within Western thought. This has been tied up in notions of 'vision' as a sense (problematized in this article), which have characterized the qualities of this relationship. The ethnography presented catalyses a reimagination of the notion of the 'visual' and 'visible' qualities of landscape through an inclusively sensorial and sensorially emplaced approach. Experiences of 'seeing sound' in the transfigurations of 'phantom vision' revealed alternative perceptual ontologies in which prior notions of the 'visual' qualities of landscape were refracted: trees became blackness, and sound that was once invisible was now seen as the landscape, for example. Landscape is not inherently 'visual', but nor are the 'visual' qualities of landscape as plainly normative as previously theorized. This landscape is not outside of the perceiver in the ways posited by perspectival epistemologies of viewing the landscape: perception is a suffusion of perceiver and the environment. The landscape seen is saturated with colourations of moods and emotions, speckled with the absences and presences describable as 'blindness' and 'seeing'.

It is clear that neither 'vision' nor 'blindness' can be homogenized experientially. Rather than being neat categories indicating substantive perceptual experience, these are instead broad spectrums of inclusively sensorially and sensorially emplaced sensuous experience. Whilst anthropologists have come to unpick differentiations based on 'culture', examining the intersectional qualities of subjectivity and sensory experience, it is apparent that differentiated categories such as 'vision impairment' are less than stable. Differentiating experience around 'abilities' or qualities of sensory experience through notions such as 'vision-impaired', 'blind', or 'sighted' is an attempt to grasp what is essentially mutable, multiple, transitory, and sometimes apparently paradoxical sensuous experience. This problematizes much phenomenology which has relied on the single homogenized body, but also sparks concern with how we include spectrums of experience without producing further homogenizing categories. Whilst, therefore, this article articulates how experiences amongst people who describe their vision as 'impaired' are relevant to sensory anthropology as a means to rethink 'sense'-based approaches, it also proposes that we need to transcend potentially limiting differential identifications.

#### NOTES

Warmest thanks to my walking companions who traipsed the South Downs landscapes with me through the changing weathers and seasons. Thank you to colleagues at the University of Sussex anthropology



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<sup>1</sup> All participants have been assigned pseudonyms.

<sup>2</sup> The term 'anatomical eye' (singular) is used as Rachel has one anatomical eye, whilst her other eye is physically present but artificial. Throughout this article, I refer to 'anatomical eyes' in the plural as all participants other than Rachel have two anatomical eyes.

<sup>3</sup> This is reflective of an ongoing philosophical concern with the domination of vision in terms of the ways in which people 'think' and 'know' about the world, referred to as 'ocularcentrism' (see Jay 1993; with reference to the landscape, see Macpherson 2005; with reference to visual studies, see Mitchell 2002: 172-6).

<sup>4</sup> 'Impaired vision' is used as a general, 'catch-all' term that includes anyone who identifies as having 'impaired' vision (cf. Bolt 2005). Although it is standard practice in education, services, and advocacy to use the term 'vision-impaired' (Bolt 2005), I will use participants' preferred terms as these demonstrate the sensorially emplaced and relational qualities of their changing sensory experiences. Rachel and Thomas described their vision as 'impaired', specifying that they have 'partial sight'. Elen and Karl identified as 'blind' as they have no current vision, distinguishing themselves by having not 'impaired vision' but 'blindness'. The choices of terminologies are political, relational, and practical (see Bolt 2005).

<sup>5</sup> Notably, the majority of my walking companions had very little recent or established experience of walking in non-urban environments. Urban environments are designed to be 'legible' for cane and guide-dog users through environmental design features such as drop kerbs and concrete surfaces which are 'legible' in varied weathers. Established walking practices for urban environments are often redundant in green settings, where there may not be clear pathways and there are varied ground textures and indistinguishable environmental features.

<sup>6</sup> It is important to clarify that the term 'capacities' is used *without* notions of 'full' or 'impaired' capacities as a premise. Notions such as 'impaired' need critique, though it is not in the scope of this article to attend to this sufficiently. 'Capacities' is preferred over a notion of 'abilities', which can insinuate learned skills and infer their constant possession. Instead, the term 'capacities' works well alongside the sensorially emplaced approach proposed as it is able to reflect the changing and adapting 'capacities' of persons, which vary according to the contexts of differing environments.

<sup>7</sup> For further general outline of nystagmus and potential qualities, see 2019a.

<sup>8</sup> Merleau-Ponty developed these ideas throughout *Phenomenology of perception* (2005 [1962]: esp. 142-7).

<sup>9</sup> Charles Bonnet Syndrome (CBS) is the experience of visual hallucinations which may occur for people who have non-congenital sight loss. These hallucinations can occur weeks or months following sight deterioration and are not related to mental health (2019b). CBS cannot be controlled, whilst 'seeing in the mind's eye' was distinguished as a way of seeing that can usually be manipulated and 'imaginative'.

<sup>10</sup> There is, however, significant research within cognitive and brain sciences investigating if (and how) people who are congenitally blind may have 'visual' experiences, for example when dreaming or stimulating the visual cortex. A key question has been whether the experience of 'visual' imagery is dependent on 'visual' perception via anatomical eyes or whether it can emerge from activation of the visual cortex in the brain via 'non-visual inputs' (see Da Silva 2003: 328).

<sup>11</sup> Despite associating the 'mind's eye' with their anatomical eyes (as a 'phantom'), Karl and Elen referred to the 'mind's eye' as singular rather than plural. McGinn examined the experience of seeing in the 'mind's eye', referring to it as a form of imaginative seeing, for people who are sighted (2004 [1950]). He noted that 'we don't suppose that we have two mind's eyes, to match two bodily eyes' and considered the reasoning for this (McGinn 2004 [1950]: 46-7). He pointed to the flattened experience of depth in the 'mind's eye' in the absence of binocularity and highlighted that it is 'all or nothing' in that we cannot close an eye of the mind (McGinn 2004 [1950]: 46-7). There is not sufficient space in this article to address these propositions with reference to the experience of blindness. The transition from seeing with the 'mind's eye' (which might not be consistently singular for everyone) to seeing through potentially binocular sight restored with surgery would make an interesting case study.

<sup>12</sup> Although this might be conventionally understood as 'synaesthesia', this notion assumes an interaction or crossover of discrete and identifiable 'senses', which is counter to the inclusively sensorial approach outlined.

<sup>13</sup> I use the term 'inclusively sensorially emplaced' as a shorthand to refer to 'inclusively sensorial' and 'sensorially emplaced' approaches used in combination.

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## Au-delà des sens : perception, environnement et déficience visuelle

### Résumé

Le « virage sensoriel » de l'anthropologie est à l'origine d'une littérature considérable sur la perception et l'expérience sensorielles. Si cette littérature critique souvent le cloisonnement des différents « sens », la manière dont les anthropologues pourraient examiner la perception sensorielle au-delà des « sens »

reste peu explorée. Sur la base d'une étude ethnographique de terrain auprès de personnes atteintes de déficience visuelle parcourant à pied le paysage des South Downs, en Angleterre, cet article développe une telle approche. Il suggère que les expériences visuelles des aveugles remettent en cause la conceptualisation de la « vision » (et de la « non-vision »). À la place de la « vision » (en tant que sens), l'article explore les « activités du voir », une approche qui contextualise le visuel afin d'examiner la nature biographiquement constituée et idiosyncrasique de la perception au sein d'un environnement. À travers une ethnographie du voir, qu'il s'agisse de ce que perçoivent les yeux ou de « représentations de l'esprit », l'autrice propose une approche qui évite d'associer la perception à l'anatomie ou de compartimenter l'expérience en différents « sens ».

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